

QUA-RAE

QUA -- HERE IS NEWS OF RAE-RADIO ASSOCIATION OF ERIE

ISSUE NO. 1 - AUGUST 1969

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CALL: 868-2220 - EVENINGS, WEEKENDS AND HOLIDAYS
671-2388 - WEEKDAYS - 8:00 a.m. to 5:00 p.m.

MATERIAL FOR OUR NEXT ISSUE MUST REACH YOUR EDITOR NO LATER THAN THE
LAST DAY OF EACH MONTH. ALL NEWS IS WELCOMED BY YOUR EDITOR.

QUA-RAE AUGUST FEATURES

1. RAE MINUTES. W3BRB - JOHN GEBLER
2. DIXIE. K3AFO - JOHN YOKOFF
3. VHF. WA3GSH - BARRY CAPILL
4. FIELD DAY. WA3MYT - RICK CUTLER
5. PROPAGATION. K3AFO - JOHN YOKOFF
6. 10 METERS. K3AFO - JOHN YOKOFF
7. 40 METERS. K3NSM - CHARLES MCCOY
8. SSB (SALE, SWAP, BUY)
9. STRAYS
10. SUBMITTING IT UP. K3AFO - JOHN YOKOFF

SUMMARY OF THE R.A.E. MEETING OF JULY 17, 1969 DE W3BRB

W3KPM reported for Civil Defense. Tom reported that a drill of the Erie County Hospital Net will be conducted in October. No warning will be given as to the exact date and time of the drill in order to simulate emergency conditions. It was reported that minor repair work at several of the hospitals was needed to put all operating stations in top notch condition. A work party has been set for September 13, and a rain date of September 20 has been scheduled. Any amateur that wishes to join R.A.C.E.S. is asked to contact W3KPM. Only licensed R.A.C.E.S. operators will be able to operate during an emergency.

The Field Day report was given by WA3FFD. The final score is as follows: 940 Qso's for 5,649 points plus 600 points for emergency power and 200 points for publicity which brings the total up to 6,449 points. Nice going fellows.

The possibility of a V.H.F. repeater for the Erie County area was discussed. Any V.H.F. people interested are asked to attend the next R.A.E. meeting. This sounds like a good idea. Let's see what can be done fellows.

WA3FFD reported that education T.V. station WOLN will give ½ hr. of air time for the promotion of amateur radio. This is a good way to show the public what ham radio is and is not. Some of you might want to contribute to this production, if so contact Jim WA3FFD Tel. 454-7615.

R.A.E. meetings are held the first and third Thursdays of the month in the Red Cross building at 6th and Sassafras. Anyone interested is invited to attend.

DXING DE K3AFO

1. Andorra Expedition Look for new prefix C3iCi
August 4 to 14 on 20, 15
and 10
2. Port-Guinea CR3KD, Pardal, is active
once again on 14, 242 to
14,245. Usually comes on
at 6:00 p.m. EDT and works
for one hour.
3. Timor Expedition to start
August 15 for one month.
Call will be CR8AJ
4. Poland New prefix 3Z will be used
from July 22, 1969 to July 22,
1970.
5. Pelican Reef 2P1AA, operation from this
location after the CR8
expedition. Its location is
92 miles West of Timor.
Transmit frequencies - 7,005
14,005, 14,195 and 21,247
Listening on - 7,030 14,030
14,240 & 21,300
6. Gus Brownings Expedition Schedule VQ9/A/WR ... Wizard Reef
VQ9/A/F ... Farquar Island
VQ9/A/A ... Aldabra Island

Best openings to N.W. Penna. on 14.023 at 2200-2330 EDT

(BOUY V.H.V. - DE WA3GSH

Although you may not be aware of it as yet there is a smidgen of 2 - Meter FM Activity in the Erie Area. Most of this activity is on 146.94 MC and is narrow-band with a deviation of $\frac{1}{2}$ or - 5 KC. A little listening on this frequency will reveal several repeater type stations on the band. There are at least three repeater facilities in the immediate area. The strongest signals have been heard from our Canadian Friends who operate via VE3KSR. I am not sure just where this repeater is actually located but I doubt that it would be difficult to locate.

The next strongest repeater facility is that of WB2TLJ/2 in Buffalo. This station can be heard most of the time although signals seem to be greatly attenuated during very cloudy periods and/or during rainy conditions. Apparently these conditions have an adverse effect on the propagation of these 2-Meter Signals. During normal weather conditions (I should be careful how I say this since the weather this Summer has been anything but normal) WB2TLJ/2 can be heard with good signal strength in our area.

There is one other repeater facility that can be heard on occasion. This is the Youngstown Repeater in Ohio. I have very little experience with this station since to date I have only received bits and snatches of its signals. On occasion a strong signal will emerge from this area but as a rule most of the activity that is heard is from Buffalo and VE3KSR.

I hope that I have not confused too many of my readers thus far with talk of repeater - Type stations. For those of you who may not be familiar with this type of operation perhaps I should elaborate on this subject.

A repeater station is actually a relay station for RF signals. It receives a signal on one frequency and retransmits this signal on another frequency. For instance let us consider the case of WB2TLJ/2:

INPUT FREQ.	146.34 MC
OUTPUT FREQ.	146.94 MC
MODE:	NARROW-BAND FM (F3)
POWER:	60 WATTS (I BELIEVE)

WB2TLJ/2 consists essentially of a separate receiving facility and a separate transmitting facility. The receiver is XTAL-Controlled and is tuned to the repeater input frequency of 146.34 MC. The transmitter is also XTAL-Controlled and has 146.94 MC as its frequency. Any signal with a predetermined signal strength that is on 146.34 MC will be heard by the WB2TLJ/2 receiver. If this signal exceeds the predetermined level that is inherent to the receiver operation the receiver will turn on the transmitter. The transmitter is turned on by means of the COR (Carrier-Operated Relay). The received signal must be of sufficient strength to cause the COR to pull in and turn on the transmitter. If it is below this level no repeater action will be achieved. It is said that this signal is unable to "Key" the repeater. Oftentimes a signal is strong enough to Key the repeater at one position and at a later time the signal is too weak to do so. This circumstance arises mostly in the case of mobile operation when the received signal is fluctuating due to changes in transmitter location (i.e., obstacles such as mountains looming up in the path of the mobile signal as it is moving around the countryside). Notice that the transmitter signal

of the repeater is on a different frequency than the received signal of the repeater. This is necessary in order to avoid interfering with the received signal.

Now that we have gone over the elements of repeater performance we can talk about repeater operation without feeling quite so uncomfortable.

It can easily be seen that the operation of a repeater station can enhance the activity on VHF in areas where operating density is low. Repeater operation can be used to link two or more locations together and will generally provide a greater degree of usability of the VHF spectrum. It is possible to communicate with Buffalo on a one-WATT portable if a repeater is in the immediate vicinity. Repeater stations are instrumental in extending the range of coverage on the VHF Bands.

As yet there appears to be little activity on 2 - Meter FM in the city of Erie. This is due in part to the lack of equipment in the hands of amateurs in this area. With a little effort it would be possible to glom into some suitable equipment and originate some FM activity on 2 - Meters in the city. 2 - Meters is a nice band to use for communication within a city the size of Erie. It seems to make far more sense to employ the VHF spectrum to rag chew with your buddy across town than to try and squeeze another sideband signal into the already crowded 75 - Meter Phone Band. You might give this matter some serious consideration. Who knows, we might even be able to start our own repeater operation if interest picks up. Think it over. If you're interested bring it up at the next club meeting and we'll kick some ideas around. Until then start thinking.

CQ PD DE W3GV/3 (DE WA3MKT)

Every year when June rolls around, all good OPS think of Field day and this year was no exception. Under the supervision of Carl WA3C00, Field Day Chairman and Jim WA3FFD, Assistant Field Day Chairman, W3GV/3 rocketed to 940 total contacts and 5640 pts. The field used for the 1969 F.D. is 8 miles out Rt. 86 and is owned by Erie County Civil Defense.

The leader in contacts with 523 was the 40M. Station running and HW-100 to an inverted VEE, 45 feet at the vertex. In the true spirit of Field Day, this antenna was made at the F.D. site. The wire used was 4 conductor intercom cable, no less. The OPS of this station were Rick WA3LSN, John K3AFO, Chuck K3RSM, Bob K3OFA, Curt WN3JCD.

In second with 320 contacts came the 20 & 15 M. Boys; Bruce WA3EYM, Rick WA3MKT, Jim WA3FFD and Pete WN3LPV with A/SWAN 500 into a 3 element beam 30 feet off the ground.

Third, from his corvette sting-ray was Carl K3OSU operating 6 with 98 contacts. SWAN equipment again, a 250 into a 6 element beam 20 feet up (and at the top of the hill).

And, last but not least the novices, Don WN3JZE, Brad WN3LKR, Mark WN3MPL operating 40 and 15 meters. In the true Ham Spirit, the HOME BREW TRANSMITTER and an AMECO 8-5A receiver were run into 40 & 15 M. Dipoles. The score of novices was not counted because they burned their logs after seeing the other Stations' Logs.

Although it did not rain during the contest, it did rain the day before and the Club's Communications truck was temporarily stuck while getting on the field. But with the help of Andy Payer W3TLA, and Joe Szymenowicz WA3GJH it was extracted. We would now like to thank all those who came out to the site to help set up or just visit. WA3GJH, W3TLA and K3MIY were a big help in getting on the air.

Among those who came out to look things over were Fred WA3GIV, Tom W3KPM, Brownie K3QAY, Joe WN3MAU, George W3LKJ and of course we can't forget Bud K3HFL on an item every good experimenter should have, a noise generator (that's a Yamaha Motorcycle).

Everyone had a good time and it was field day we will remember for a long time. Hope to see you next year.

PROPAGATION DE K3AF0

The high bands 20, 15 and 10 will start to pick up now that summer is passing. Regular 15 mtr. openings are beginning to appear East Coast of Europe. The 20 mtr. band still fine to much of the world late at night and early in morning. Long path to 9U, 9M, etc. during mornings 0700 - 0800 EDT from N.W. Pennsylvania.

Look for evening openings to Europe on 10 mtrs. during middle and end of August.

"Propagation and WWV" - Besides Standard Radio Frequencies, Standard Audio Frequencies and Time Signals WWV at Ft. Collins, Colorado transmits propagation forecasts.

Radio propagation conditions are broadcast in International Morse Code during the last half of every fifth minute of each hour.

The WWV forecast announcements refer to propagation along paths in the North Atlantic Area, such as New York City to Berlin. The announcements are short term forecasts prepared by the ESSA, Telecommunications Disturbance Forecast Center, Box 178, Fort Belvoir Virginia 22060. The forecast tells users the condition of the ionosphere and the radio quality expected during the next six hours. The forecasts are based on data obtained from worldwide geophysical and solar observatories. These data include radio soundings of the upper atmosphere, observations of the geomagnetic field, solar activity and other information.

The WWV forecast consists of a letter and a numeral broadcast in International Morse Code.

(V) DISTURBED
(U) UNSETTLED
(N) NORMAL

Radio quality is based on a 1 to 9 scale. 1. useless, 2. very poor, 3. poor, 4. poor-to-fair, 5. fair, 6. fair-to-good, 7. good, 8. very good, 9. excellent.
If conditions are normal and "good" N7 would be broadcast.

10 MTR ACTIVITIES DE K3AFO

1. Don't forget every Sunday Evening -- Lake Erie Emergency Net. 29.150 MHz at 8:00 p.m. EDT.
2. Transmitter hunt -- Scheduled for August 17, 1969 on 29.150 MHz at 7:00 p.m. EDT. W3BRB will hide the transmitter on 10 mtrs. Don't be suprised if the strongest beam heading is toward the moon, hi, hi.
3. Did you know that in the U.S.S.R., any radio amateur can get a ham ticket without knowing the code for operation on 28 to 29.7.
4. Who says there's no propagation on 10 mtrs. during the summer? -- You truly worked Gus Browning VQ9/A/D from Desroches Island in the Indian Ocean, June 11 on 28.030 CW at 1330 EDT (579 both ways).
5. Heard W3BRB working K7YQ on June 22. The French Guiana station was on 28.6 SSB, 1400 EDT.
6. CE7DW, Ernesto, worked by many locals on 10 mtr. A.M. reports having problems with electric current during openings to stateside.
7. Good summer catches on 10 mtrs. --
ZD9RM (Tristan da Cunha) Ray, works regularly on 10 mtr. SSB.
Can be caught in N.W. Pennsylvania around 1300 EDT. All QSL's to W2GKX.

G2JW (Nauru) Jack, can be caught on a late evening opening during August (to Oceania) on 28.555 SSB

8. All Asian DX contest on August 30 - 31.

FORTY METERS DE K3HSM

This band, it is fair to say, is probably the most infamous if not notorious band of frequencies available to the amateur radio operator. The propagation characteristics of 40 meter from twilight to dawn makes it truly a fascinating band to the amateur. Unfortunately, foreign broadcast stations such as Radio Moscow and even our own Voice of America transmitters are operated on these frequencies to take advantage of the nighttime - long skip conditions. Strong signals and crowded band conditions can quickly discourage all but the most courageous -- most stubborn or most inebriated member of the fraternity. A receiver of broad selectivity will invariably show a big blurb of signals between 7.0 and 7.3 MHz. However, as receiver selectivity increases and S/N ratio improves many exotic signals and fascinating band conditions are revealed to

the brave listener. For example, WEPAA's SSB signal could be discerned above the noise level on 7.087 MHz at 6:45 EDT on 7/31/69 and the receiving antenna was 1/2 of a 10 meter dipole strung up in the overhead beams in the basement! Using a 40 meter verticle 21.2 SOC in SSB signal on 7.090 MHz working three fellows stateside on 7.233 MHz.

To give you an idea of what can be worked on 40 SSB -- during field day of this year, almost every state was worked using 200 watts DC input and an inverted Vee antenna. The best long-haul contacts were:

Hawaii	Puerto Rico
Canada Zone	Washington
Los Angeles	British Columbia

In the coming newsletter I would like to construct an accurate picture of 40 meters and also relate the most effective method of making contacts both DX and stateside so that 40 meters can be a "fun" band for you.

SSB (CALL, SWAP OR BUY) DE K3APG

1. EM-32, Home Brew Linear (1500 PEP), Microphone and Bow Key Relay. Its a steal at \$175.00 ! Contact W3FVX, John Saunigala, 413 Chautauque Blvd, Call 454-0318
2. Lafayette EL 320 6 tube General coverage receiver Heath HF-1 V.F.O., Heath HG-10 V.F.O. and Power Supply for the HF's. Call W3JDK Robert Bair 725-9226.
3. Looking for 180 50 15 wire coil -- contact K3QJN if you know of any around (527-8554 Dennis Banderan).

STORY DE K3APG

- W3JDK Mike Hall, attending Edinboro State College and majoring in Earth-Space Science
- W3FVX John Saunigala not too active on the ham bands -- lets spark him up !
- K3JDK Bob Reisenweber reports that his new room in the basement is near completion and he will be ready for the winter DXing. Bob has 127 confirmed and offers a future threat to the DX crowd (long way to go Bob before you catch me)!
- W3GGS David Miller is planning to go KTTY soon.
- W3BRE John Gebler enjoyed his 3 day stay at F2S land. Ask him about it some time.
- W3JED Did Lin Jeter get that rare KFF he was chasing on 30 meters the other night?

K3LQF Bob Baptist is sporting a new tower and look what he has on top of the thing! Bob, do you think you have enough cement in the base and its properly grounded? (Bob is only using about 40 tons of cement!)

K3HSM Charles McCoy moving to a new QTH soon (don't worry Chuck will still be in Erie).

K3OFA Nick Egnot, plans a SSB transceiver. We are all looking forward to the return of Nick on the air waves.

W3TPW Bert Van Houten, patiently waiting for 10 to open in September so he can work someone other than CE7DW.

W3WDK Robbie "Directional Loop" Weaver picked a great spot for the XMTR Hunt last month, but not good enough (he was found ½ hour)

K3UVN Gordie Thompson, has been spending more time golfing than hamming and from the scores he's been getting, he ought to radio control the golf ball.

K3AFO John Yokoff -- someone noted that John needs a splatter guard for transmitter hunts.

WA3HDK Bob Bair reports that the 6 meter net is going strong. They had 15 check-ins on July 27. It seems that Bob is having a small problem -- he bought some 7 foot racks for his shack, but found later that they are larger than his shack (get out the saw Bob!).

K3VLP George Dickey is causing a lot of QRM with his new rig (mostly with XYL).

SUMMING IT UP DE K3AFO

QUA-RAE is being distributed to all Radio Amateurs in the Erie County area. If anyone is missed, please let us know so we can add them to our mailing list. We would appreciate any comments, articles or just contributions to our "SSB" or "STRAYS" section. You can contact any of the Motley Crew if you have any news. We have many more sections planned for up-coming QUA-RAE letters, even a "GRIPEs" section so that everyone can let off a little steam. Remember, we can only inform other amateurs through this letter if you inform us. Be patient, this bulletin can only improve with experience. Plan to contribute to the QUA-RAE so we can once again build a strong Amateur Fraternity in Erie.

Thanks goes to all the fellows who contributed this month to QUA-RAE, also to the CD for use of their presses and the RAE for sponsoring the bulletin (paper, postage, etc.). Thank you to Miss Bonnie Zacyk for the difficult chore of typing (especially reading my writing).
C U all next month ----- REMEMBER THE QUA-RAE !